

IN THE SPECIFICATION:

Please replace paragraph number [0003] with the following rewritten paragraph:

[0003] State of the Art: Linear bearing assemblies are employed to provide guided linear motion. A linear bearing assembly may carry, or have attached thereto, some structure to be moved linearly between two or more locations along a guide rail. Alternatively, the linear bearing assembly may be fixed in position and the guide rail carrying a structure may be moved with respect to the linear bearing assembly. Of course, the use of multiple, parallel guide rails and more than one linear bearing assembly per guide rail are common.

Please replace paragraph number [0006] with the following rewritten paragraph:

[0006] To maintain a desired spatial relationship between a linear bearing assembly and its associated guide rail as bearing pads wear, shims are conventionally disposed between a side wall or an end (horizontal) wall of the bearing slide and the bearing pad disposed on that side. As the bearing pad continues to wear, thicker shims, multiple stacked shims, or both, are inserted. This approach, while effective, is time consuming and may require significant trial and ~~error~~ error of shim insertion and removal until the correct shim thickness, or combination of stacked shims providing appropriate thickness, is selected. Of course, use of shims may also require that the operator of the structure including the linear bearing assemblies obtain or stock a shim set for each side of each bearing slide with a bearing pad so that both vertical and horizontal clearances may be maintained. Thus, one may need to repeatedly shim a bearing pad at one side wall of the bearing slide cavity to maintain a side-to-side snug fit between opposing vertically oriented bearing pads. Similarly, as the bearing pad carried on a horizontal wall of a bearing slide wears, it is necessary to shim between that bearing pad and the bearing slide to maintain a constant vertical relationship between the guide rail and the bearing slide. For some high dimensional tolerance applications, shimming may not be required as frequently as in other, low dimensional tolerance applications, but bearing pad wear and the inconvenience of conventional shimming techniques eventually become a problem for most applications. In the case of

extremely low tolerance applications, it may be necessary to shim both vertically oriented bearing pads to maintain the guide rail centered within the bearing slide.

Please replace paragraph number [0009] with the following rewritten paragraph:

[0009] In one exemplary ~~embodiment~~ embodiment, one or more, and preferably two, retention elements in the form of retention bolts extend from a counterbore in the exterior of the bearing wall, into and through the wall defining the cavity side and into a threaded bore within the bearing pad. An adjustment element in the form of a set screw associated with each retention bolt also extends from an aperture in the wall and contacts the rear face of the bearing pad. In addition, the adjustment element may comprise a biasing element such as a spring. If ultra-high molecular weight polyethylene bearing pads are employed, tee-nuts including the threaded bore may be embedded in the bearing pads to prevent bearing pad tear-out under loading, and a rigid stiffener or backing plate may be bonded to the rear face of the bearing pad.

Please replace paragraph number [0015] with the following rewritten paragraph:

[0015] Retention bolts 20 may comprise, for example, flat head, PHILLIPS® head, or ALLEN HEAD® machine bolts or screws, the threaded ends of which are engaged with the internal threads on the bore walls 30 of tee-nuts 32 (shown in broken lines) embedded into each respective bearing pad 18 or 18'. As depicted, two retention bolts 20 may be employed to position each bearing pad 18 and 18'. Set screws 34, which may be bull-nose type, are threaded into apertures 36 in one side wall 14 and in end wall 16, although set screws 34 may be disposed in threaded apertures 36 in each side wall 14 if precise, centered alignment of guide rail 28 with respect to bearing ~~side~~ slide 12 is desired. Aluminum stiffeners or backing plates 38 to provide additional integrity to the bearing pad ~~position~~ position, may optionally be bonded to the rear faces of one bearing pad 18 and to bearing pad 18' which are to be contacted by set screws 34, as explained further below.

Please replace paragraph number [0017] with the following rewritten paragraph:

[0017] In this way, it may be appreciated that advancing set screws 34 into contact with the rear face of the bearing pad 18 or 18' may apply a force to a bearing pad 18 ~~of~~ or 18' that abuts the bearing pad 18 or 18' against the side 26 of guide rail 28. Further, it may also be appreciated that tightening the retention bolts 20 may apply a force generally oppositely to the force applied by the set screws 34 to bearing pads 18 or 18', which may reduce the overall magnitude of force that abuts a bearing pad 18 or 18' against an associated side of guide rail ~~28~~ 28. Accordingly, the present invention provides a mechanism for selectively adjusting the amount or magnitude of force that holds or abuts a bearing pad 18 or 18' against an associated side of guide rail 28. Of course, many alternatives exist for applying or adjusting forces in mechanical apparatus. For instance, threads may be used to apply or adjust forces, as may biasing elements, such as springs, mechanical bending, or other mechanisms. Accordingly, set screws 34 may comprise biasing elements, such as, for example, compression springs for applying or adjusting a force to the bearing pad 18 or 18'. In one particular example, set screws 34 may comprise a so-called spring plunger sold by Carr-Lane Manufacturing Company of St. ~~Louis~~ Louis, Missouri.